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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/950,028	ITAKI ET AL.
	Examiner Thomas J. Lett	Art Unit 2625

— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 14 September 2006.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 210.

Disposition of Claims

4) Claim(s) 1-16 and 37-42 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-16 and 37-42 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 28 March 2006 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.15(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(b).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date _____

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____
 5) Notice of Informal Patent Application
 6) Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 14 September 2006 have been fully considered but they are not persuasive. Regarding claims 4-16, the prior art of Shima displays printers based on compatibility to print a job. The attributes are logically processed to produce a result of compatible printer devices satisfying desired attributes. Each time a user displays such a screen to acquire desired compatible printers, the available printers are displayed. It is obvious that a printer that is offline or not available would fail to show since its available attributes (which are offline) would not possibly produce a valid result as a compatible printer. Applicant also argues that Shima does not teach displaying all the attribute information of plural image output devices satisfying a designated condition, and also does not teach displaying the attribute information common to the plural image output devices satisfying the designated condition. On the contrary, Shima shows in Fig. 25 the display of attributes common to printers (e.g., rendering of text data) each time the screen is displayed.

Applicant argues that Shima fails to teach displaying an error or alert message if a printer that is not available for printing receives a print job. On the contrary, Shima discloses the notification of a status (reads on alert message) which would indicate the unavailability of printing if a job is sent to the printer (col. 20, lines 58-63).

Applicant argues that Sakaguchi fails to disclose or suggest searching output devices for output devices that satisfy a search condition, and Sakaguchi also fails to

disclose or suggest registering image output devices as a group and grouping the image output devices searched on the basis of information for group instruction and registration of the image output devices, as recited in independent claim 37 and similarly recited in independent claims 39, 41 and 42. Examiner does not rely on Sakaguchi for searching output devices satisfying an output condition. Sakaguchi was only relied upon for grouping of printer devices.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 4-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Shima (USPN 6,940,615 B1).

With respect to claim 4, Shima discloses an image input device (host 54 sends print jobs to network-compatible printer 51 as input to the printing system, col. 24, lines 40-44) for use in an image output system (see Fig. 12, printer 51 and downstream printers, col. 24, lines 44-57), wherein the image output system includes plural image output devices (printer 51 and downstream printers 52, 53, ..., n, col. 24, lines 44-57) connected to a network (internet 55, see Fig. 12) and outputs images on the basis of

image data and image output format information (performance attributes, col. 24, lines 51-57) transmitted through the network, the image output system further including an image output managing device (network-compatible printer 51, see at least col. 23, lines 43-60) connected to the network, which transmits an operation screen generating signal to generate, on the basis of the attribute information of each of the plural image output devices, at least one of a first operation screen for displaying attribute information common to plural image output devices satisfying a designated condition (settings window 60, col. 26, lines 5-7 and see Fig. 17A) and a second operation screen for displaying all the attribute information of the plural image output devices satisfying the designated condition (settings window 60, col. 26, lines 5-7 and see Fig. 17B), and transmits information on the output format of an image received through the network and the image data to a designated image output device, wherein said image input device includes:

an image data input device (host 54 user interface screen sends print jobs to network-compatible printer 51 as input to the printing system, col. 24, lines 40-44) for inputting the image data;

a display input device (settings window 60, col. 26, lines 5-7) for inputting information to designate a condition for an operation screen to be displayed, displaying thereon at least one of the first operation screen for displaying the attribute information common to the plural image output devices (printer 51 and downstream printers 52, 53, ..., n, col. 24, lines 44-57) satisfying the designated condition and the second operation screen for displaying all the attribute information of the plural image output devices

satisfying the designated condition generated on the basis of the operation screen generating signal; and inputting, from the displayed operation screen, information to designate an image output device (each settings window 60 corresponds to a possible output printer, col. 26, lines 5-7) from which the image is output and information on the output format of the image (performance attributes, col. 24, lines 51-57) to be output from the designated image output device; and

a transceiver that is connected to the network (host 54 is connected to communicate via Internet 55 using TCP/IP, col. 23, lines 22-25) and transmits the information input from the display input device (settings window 60, col. 26, lines 5-7) and the image data input from the image data input device through the network (internet 55, see Fig. 12) and also receives the operation screen generating signal (settings window 60, col. 26, lines 5-7) through the network.

With respect to claim 5, Shima discloses an image input device wherein when the number of attributes to be displayed on said operation screen at least equals a predetermined value, excessive attributes beyond the predetermined value are displayed below one attribute (settings window 60, col. 26, lines 5-7 and see Figs. 17A, 17B, displays necessary and unnecessary attributes).

With respect to claim 6 Shima discloses an image input device wherein an interface is provided device (host 54 user interface screen sends print jobs to network-compatible printer 51 as input to the printing system, col. 24, lines 40-44), with the excessive attributes displayed in detail in accordance with an operation carried out using said interface (see Fig. 17B).

With respect to claim 7 Shima discloses an image output managing device (network-compatible printer 51, see at least col. 23, lines 43-60) for use in an image output system (see Fig. 12, printer 51 and downstream printers, col. 24, lines 44-57) including:

plural image output devices (printer 51 and downstream printers 52, 53, ..., n, col. 24, lines 44-57) that are connected to a network (internet 55, see Fig. 12) and output images on the basis of image data and information on image output formats (performance attributes, col. 24, lines 51-57) transmitted through said network;

an image data input device (host 54 user interface screen sends print jobs to network-compatible printer 51 as input to the printing system, col. 24, lines 40-44) for inputting the image data;

a display input device (settings window 60, col. 26, lines 5-7) for inputting information to designate a condition for an operation screen to be displayed, displaying thereon at least one of a first operation screen (settings window 60, col. 26, lines 5-7 and see Fig. 17A) for displaying attribute information common to plural image output devices (printer 51 and downstream printers 52, 53, ..., n, col. 24, lines 44-57) satisfying a designated condition and

a second operation screen (settings window 60, col. 26, lines 5-7 and see Fig. 17B) for displaying all the attribute information of the plural image output devices (printer 51 and downstream printers 52, 53, ..., n, col. 24, lines 44-57) satisfying the designated condition, the first and second operation screens being generated on the basis of an operation screen generating signal, and inputting, from the displayed

operation screen, information to designate an image output device from which the image is output and information on the output format of the image (performance attributes, col. 24, lines 51-57) to be output from said designated image output device; and

a transceiver (host 54 is connected to communicate via Internet 55 using TCP/IP, col. 23, lines 22-25) that is connected to the network (internet 55, see Fig. 12) and transmits the information input from said display input device and the image data input from said image data input device through said network to the image output managing device and also receives a signal to generate said operation screen through said network, wherein said image output managing device is connected to said network, transmits an operation screen generating signal for generating at least one of the first operation screen for displaying the attribute information common to said plural image output devices (printer 51 and downstream printers 52, 53, ..., n, col. 24, lines 44-57) satisfying the designated condition and the second operation screen for displaying all the attribute information of said plural image output devices satisfying the designated condition on the basis of the attribute information of each of said plural image output devices, and transmits the information on the output format of the image and the image data received (performance attributes, col. 24, lines 51-57) through said network to a designated image device.

With respect to claim 8, Shima discloses an image output managing device of claim 7, wherein when all the attributes of said image output devices satisfying the condition are displayed on said operation screen (settings window 60, col. 26, lines 5-7

and see Figs. 17A, 17B), one of the image output devices is selected on the basis of the output format information input (performance attributes, col. 24, lines 51-57) from said operation screen.

With respect to claim 9, Shima discloses an image output system comprising:

- a plurality of image output devices (printer 51 and downstream printers 52, 53, ..., n, col. 24, lines 44-57) connected to a network (internet 55, see Fig. 12) that output images on the basis of image data and image output format information (performance attributes, col. 24, lines 51-57) transmitted through the network;
- an image data input device (host 54 user interface screen sends print jobs to network-compatible printer 51 as input to the printing system, col. 24, lines 40-44) for inputting the image data;
- a display input device (settings window 60, col. 26, lines 5-7) for inputting information to designate a condition, in response to a signal for displaying thereon an operation screen for the image output devices of at least one of a first operation screen (settings window 60, col. 26, lines 5-7 and see Figs. 17A) displaying attributes common to the image output devices satisfying the condition, and a second operation screen (see Fig. 17B) displaying all attributes of the image output devices satisfying the condition, and inputting from the displayed operation screen, information to designate from which image output device to output an image and output format information (performance attributes, col. 24, lines 51-57) for the image to be output from the designated image output device; and

a transceiver (host 54 is connected to communicate via Internet 55 using TCP/IP, col. 23, lines 22-25) and image output managing device (network-compatible printer 51, see at least col. 23, lines 43-60), wherein the image output managing device transmits said signal, and the transceiver receives the signal and transmits image data and information input from said display (using settings window 60, col. 26, lines 5-7) and image data input devices through said network to the image output managing device, and the image output managing device transmits the image data and information to a designated image output device.

With respect to claim 10, Shima discloses a user interface device (host 54 user interface screen sends print jobs to network-compatible printer 51 as input to the printing system, col. 24, lines 40-44) for selecting an image output device of a plurality of image output devices connected to a network (printer 51 and downstream printers 52, 53, ..., n, col. 24, lines 44-57), the user interface device comprising an operation screen displaying attribute information of the image output devices for selection (settings window 60, col. 26, lines 5-7)), which are connected to the network (internet 55, see Fig. 12) and available for image output each time the operation screen is displayed (Fig. 25 the display of attributes common to printers (e.g., rendering of text data) each time the screen is displayed) on the basis of attribute information of each of the image output devices (performance attributes, col. 24, lines 51-57).

With respect to claim 11, Shima discloses an image input device (image scanner 1, col. 6, line 36) for use in an image output system, wherein the image output system includes a plurality of image output devices (printer 51 and downstream printers 52, 53,

...,n, col. 24, lines 44-57) connected to a network (internet 55, see Fig. 12) and that output images on the basis of image data and output image format information (performance attributes, col. 24, lines 51-57), and an image output managing device (network-compatible printer 51, see at least col. 23, lines 43-60) connected to the network, which checks whether the image output devices are available for image output each time the operation screen is displayed (Fig. 25 the display of attributes common to printers (e.g., rendering of text data) each time the screen is displayed) and transmits a signal for generating the operation screen (using settings window 60, col. 26, lines 5-7) on the basis of only attribute information of each one of the image output devices which are determined to be available for image output, the image input device comprising:

an image data input device (host 54 user interface screen sends print jobs to network-compatible printer 51 as input to the printing system, col. 24, lines 40-44) for inputting the image data;

a display input device (settings window 60, col. 26, lines 5-7) for displaying said operation screen, and

inputting from said operation screen (see Fig. 17A, settings window 60, col. 26, lines 5-7), information indicating image output devices for outputting images and image output format information (performance attributes, col. 24, lines 51-57) for images to be output from said designated image output devices; and

a transceiver (host 54 is connected to communicate via Internet 55 using TCP/IP, col. 23, lines 22-25) connected to the network (internet 55, see Fig. 12) that transmits the information and image data input from said display input device through the network

to said image output managing device and receives the signal for generating said operation screen through said network.

With respect to claim 12, Shima discloses an image input device (host 54 user interface screen sends print jobs to network-compatible printer 51 as input to the printing system, col. 24, lines 40-44) for use in an image output system (see Fig. 12, printer 51 and downstream printers 52, 53, ...,n, col. 24, lines 44-57), wherein the image output system includes a plurality of image output devices (printer 51 and downstream printers 52, 53, ...,n, col. 24, lines 44-57) connected to a network (internet 55, see Fig. 12) and that output images on the basis of image data and output image format information (performance attributes, col. 24, lines 51-57), and an image output managing device (network-compatible printer 51, see at least col. 23, lines 43-60) connected to the network that transmits a signal for generating an operation screen on the basis of attribute information of each of the image output devices available for image output, the image input device comprising:

an image data input device (host 54 user interface screen sends print jobs to network-compatible printer 51 as input to the printing system, col. 24, lines 40-44) for inputting the image data;

a display input device (settings window 60, col. 26, lines 5-7) for displaying said operation screen, and inputting from said operation screen, information indicating image output devices for outputting images and image output format information for images to be output from said designated image output devices (see Fig. 12, printer 51 and downstream printers 52, 53, ...,n, col. 24, lines 44-57); and

a transceiver (host 54 is connected to communicate via Internet 55 using TCP/IP, col. 23, lines 22-25) connected to the network that requests status checks (col. 4, lines 11-15) during predetermined operation of said operation screen, and transmits the information and image data input from said display input device through the network to said image output managing device when image output devices available for image output are designated, and

receives the signal for generating said operation screen through said network (internet 55, see Fig. 12), and transmits to the display input device a signal for displaying an error or alert information on the operation screen when an image output device which is not available for image output is designated (notification of a status (reads on alert message) which would indicate the unavailability of printing if a job is sent to the printer, col. 20, lines 58-63).

With respect to claim 13, Shima discloses an image output managing device (network-compatible printer 51, see at least col. 23, lines 43-60) for use in an image output system including a plurality of image output devices (printer 51 and downstream printers 52, 53, ..., n, col. 24, lines 44-57) that are connected to a network (internet 55, see Fig. 12) and that output images on the basis of image data and image output format information (performance attributes, col. 24, lines 51-57) transmitted through the network, the device comprising:

an image data input device (host 54 user interface screen sends print jobs to network-compatible printer 51 as input to the printing system, col. 24, lines 40-44) for inputting the image data;

a display input device (settings window 60, col. 26, lines 5-7) for displaying in response to a signal, an operation screen and inputting from the operation screen, information to designate from which image output devices to output images and output format information for the images to be output from the designated image output devices (printer 51 and downstream printers 52, 53, ..., n, col. 24, lines 44-57); and

a transceiver (host 54 is connected to communicate via Internet 55 using TCP/IP, col. 23, lines 22-25) to said network (internet 55, see Fig. 12), wherein the transceiver transmits image data and information input (performance attributes, col. 24, lines 51-57) from said display and image data input devices through said network to the image output managing device, and the image output managing device checks whether the image output devices are available for image output each time the operation screen is displayed (Fig. 25 the display of attributes common to printers (e.g., rendering of text data) each time the screen is displayed), and transmits the signal for generating the operation screen on the basis of only the attribute information (performance attributes, col. 24, lines 51-57) of each image output device that is available for image output, and transmits the image data and information to the designated image output devices.

With respect to claim 14, Shima discloses an image output managing device (network-compatible printer 51, see at least col. 23, lines 43-60) for use in an image output system including a plurality of image output devices (printer 51 and downstream printers 52, 53, ..., n, col. 24, lines 44-57) that are connected to a network (internet 55, see Fig. 12) and that output images on the basis of image data and image output format

information (performance attributes, col. 24, lines 51-57) transmitted through the network, the device comprising:

an image data input device (host 54 user interface screen sends print jobs to network-compatible printer 51 as input to the printing system, col. 24, lines 40-44) for inputting the image data;

a display input device (settings window 60, col. 26, lines 5-7) for displaying in response to a signal, an operation screen and inputting from the operation screen information to designate from which image output devices to output images and output format information for the images to be output from the designated image output devices; and

a transceiver (host 54 is connected to communicate via Internet 55 using TCP/IP, col. 23, lines 22-25) connected to said network, wherein when image output devices available for image output are designated, the transceiver transmits on the basis of status of image output devices (col. 4, lines 11-15), image data and information (performance attributes, col. 24, lines 51-57) input from said display and image data input devices through said network to the image output managing device, and the image output managing device transmits the signal for generating the operation screen on the basis of attribute information of each of the image output devices, requests status checks for designated image output devices during predetermined operation of the operation screen, and when image output devices available for image output are designated, transmits the image data and information (performance attributes, col. 24, lines 51-57) to the designated image output devices and when an image output device

which is not available for image output is designated, transmits to the display input device a signal for displaying an error or an alert information on the operation screen (notification of a status (reads on alert message) which would indicate the unavailability of printing if a job is sent to the printer, col. 20, lines 58-63).

With respect to claim 15, Shima discloses an image output system comprising:

- a plurality of image output devices (printer 51 and downstream printers 52, 53, ..., n, col. 24, lines 44-57) connected to a network (internet 55, see Fig. 12) that output images on the basis of image data and image output format information (performance attributes, col. 24, lines 51-57) transmitted through the network;
- an image data input device (host 54 user interface screen sends print jobs to network-compatible printer 51 as input to the printing system, col. 24, lines 40-44) for inputting the image data;
- a display input device (settings window 60, col. 26, lines 5-7) for displaying in response to a signal, an operation screen and inputting from the operation screen, information to designate from which image output devices to output images and output format information (performance attributes, col. 24, lines 51-57) for the images to be output from the designated image output devices; and
- a transceiver (host 54 is connected to communicate via Internet 55 using TCP/IP, col. 23, lines 22-25) and image output managing device (network-compatible printer 51, see at least col. 23, lines 43-60) connected to said network, wherein the transceiver transmits image data and information (performance attributes, col. 24, lines 51-57) input from said display and image data input devices through said network to the image

output managing device, and the image output managing device checks whether the image output devices are available for image output each time the operation screen is displayed (Fig. 25 the display of attributes common to printers (e.g., rendering of text data) each time the screen is displayed), and transmits the signal for generating the operation screen on the basis of only the attribute information of each image output device that is determined to be available for image output, and transmits the image data and information (performance attributes, col. 24, lines 51-57) to the designated image output devices.

With respect to claim 16, Shima discloses an image output system comprising:

- a plurality of image output devices (printer 51 and downstream printers 52, 53, ..., n, col. 24, lines 44-57) connected to a network (internet 55, see Fig. 12) that output images on the basis of image data and image output format information (performance attributes, col. 24, lines 51-57) transmitted through the network;
- an image data input device (host 54 user interface screen sends print jobs to network-compatible printer 51 as input to the printing system, col. 24, lines 40-44) for inputting the image data;
- a display input device (settings window 60, col. 26, lines 5-7) for displaying in response to a signal, an operation screen and inputting from the operation screen, information to designate from which image output devices to output images and output format information for the images to be output from the designated image output devices; and

a transceiver (host 54 is connected to communicate via Internet 55 using TCP/IP, col. 23, lines 22-25) and image output managing device (network-compatible printer 51, see at least col. 23, lines 43-60) connected to said network, wherein when an image output device available for image output is designated, the transceiver transmits image data and information input from said display and image data input devices through said network to the image output managing device, and the image output managing device requests status checks for a designated image output devices (col. 4, lines 11-15) during predetermined operation of the operation screen, transmits the signal for generating the operation screen on the basis of attribute information of each image output device, and transmits the image data and information from said transceiver to the designated image output device, and when an image output device which is not available for image output is designated, transmits to the display input device a signal for displaying an error or an alert information on the operation screen (notification of a status (reads on alert message) which would indicate the unavailability of printing if a job is sent to the printer, col. 20, lines 58-63).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-3 are rejected under 35 U.S.C. 102(e) as being unpatentable over Shima (USPN 6,940,615 B1) in view of Mastie et al (USPN 6,145,031 A).

Regarding claim 1, Shima discloses a method of displaying a screen for operating a plurality of image output devices (printer 51 and downstream printers 52, 53, ..., n, col. 24, lines 44-57) that each have different attributes, the method comprising the steps of:

displaying a screen with selectable attributes (settings window 60, col. 26, lines 5-7) based on the result of the logical operation (user is presented with selectable attributes of printers in a number of settings windows 60, col. 26, lines 29-42).

Shima does not expressly disclose performing a logical operation of the attributes of the image output devices satisfying a desired condition.

Mastie et al teach of the logical printer which groups physical printers having similar attributes, col. 8, lines 8-10.

Shima and Mastie et al are analogous art because they are from the similar problem solving area of printer management. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to add the logical printer feature of Mastie et al to the display screen of Shima in order to obtain a device capable of displaying common printer groupings. The motivation for doing so would be to visually select capable printers.

With respect to claim 2, Shima discloses a method of claim 1, wherein the logical operation is a logical product (AND) operation or logical sum (OR) operation (Fig. 15 shows a logical operation where attributes of a print job are compared with printer

attributes and an analogous truth table would result in order to select capable printers.

Shima refers to this as a determination operation, see at least col. 23, lines 56-59).

With respect to claim 3, Shima discloses a method of claim 1, wherein the logical operation is carried out for every attribute of said plural image output devices (Fig. 15 shows a logical operation where attributes of a print job are compared with printer attributes and an analogous truth table would result in order to select capable printers. Shima refers to this as a determination operation, see at least col. 23, lines 56-59).

4. Claims 37-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shima (USPN 6,940,615 B1) in view of Sakaguchi (JP2000132354A).

With respect to claim 37 Shima discloses a method for image output devices in an image output system, wherein the image output system includes a plurality of image output devices (printer 51 and downstream printers 52, 53, ..., n, col. 24, lines 44-57) connected to a network (internet 55, see Fig. 12), with each image output device having a plurality of attributes, the method comprising:

searching for image output devices having a designated attribute (the printer driver initiates an attribute request to satisfy the requirement(s) of a print job, col. 25, line 60 – col. 26, line3).

Shima does not disclose expressly a group registering method, grouping the image output devices searched on the basis of information for group instruction and registration of said image output devices.

Sakaguchi teaches a method of registering printers as a group, and the ability to display these printers for selection (paras. 0018-0021).

Shima and Sakaguchi are analogous art because they are from the similar problem solving area of displaying capable devices to a user based on attributes. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to add the group registration feature of Sakaguchi to Shima in order to obtain a method capable of displaying a selection of devices. The motivation for doing so would be to choose from amongst a group of registered printers.

With respect to claim 38, Shima discloses wherein searching for image output devices having the designated attribute is performed on the basis of pre-stored attribute information or detected attribute information of each of said image output devices (the user parameters are prestored so that a screen can be generated, col. 25, line 65 – col. 26, line 3).

With respect to claim 39, Shima discloses an image output system comprising:
a plurality of image output devices (printer 51 and downstream printers 52, 53, ..., n, col. 24, lines 44-57) each of which is connected to a network (internet 55, see Fig. 12) and outputs an image on the basis of image data transmitted through said network;
an image input device (host 54 user interface screen sends print jobs to network-compatible printer 51 as input to the printing system, col. 24, lines 40-44) connected to said network (internet 55, see Fig. 12), the image input device including a image data input portion (host 54 user interface screen sends print jobs to network-compatible printer 51 as input to the printing system, col. 24, lines 40-44) for inputting the image data, a display input portion (settings window 60, col. 26, lines 5-7) for inputting

information for indicating a search condition for image output devices and information.

and

a managing device (network-compatible printer 51, see at least col. 23, lines 43-60) that is connected to said network searches said plurality of image output devices for those satisfying the search condition.

Shima does not disclose expressly a selective grouping of image output devices satisfying the search condition, and transmitting/receiving portion for transmitting the image data input from said image data input portion and the information input from said display input portion and receives the attribute information of image output devices satisfying the search condition, and registers image output devices as a group according to the information for instruction of selective grouping.

Sakaguchi teaches a method of searching, registering printers as a group, and the ability to display these printers for selection (paras. 0018-0021) wherein the host receives a list of printers in which a multiple selection is possible (para. 0021).

Shima and Sakaguchi are analogous art because they are from the similar problem solving area of displaying capable devices to a user based on attributes. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to add the group registration feature of Sakaguchi to Shima in order to obtain a method capable of displaying a selection of devices. The motivation for doing so would be to choose from amongst a group of registered printers.

With respect to claim 40, Shima discloses an image input device for use in an image output system including a plurality of image output devices (printer 51 and

downstream printers 52, 53, ..., n, col. 24, lines 44-57) each of which is connected to a network (internet 55, see Fig. 12) and outputs an image on the basis of image data and an output format transmitted through said network, and a managing device (network-compatible printer 51, see at least col. 23, lines 43-60) that is connected to said network, searches said image output devices on the basis of attribute information of each of said image output devices for those satisfying a search condition (in step 95 a desired profile group is attained, col. 20, lines 1-4), transmits the attribute information of the image output devices searched through said network, the image input device comprising:

an image data input portion (host 54 user interface screen sends print jobs to network-compatible printer 51 as input to the printing system, col. 24, lines 40-44) for inputting image data;

a display input portion (settings window 60, col. 26, lines 5-7) for inputting information for displaying a search condition for said image output devices and information for instruction of selective grouping of image output devices satisfying the search condition, and displaying the attribute information of said image output devices satisfying the search condition (in step 95 a desired profile group is attained, col. 20, lines 1-4); and a transmitting/receiving portion (host 54 is connected to communicate via Internet 55 using TCP/IP, col. 23, lines 22-25) that is connected to said network, transmits the image data input from said image data input means through said network, and the information input from said display input means and receives the attribute information of said image output devices satisfying the search condition.

Shima does not disclose expressly registering the image output devices on the basis of information for instruction of grouping.

Sakaguchi teaches a method of searching, registering printers as a group (paras. 0018-0021) based on attributes.

Shima and Sakaguchi are analogous art because they are from the similar problem solving area of displaying capable devices to a user based on attributes. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to add the group registration feature of Sakaguchi to Shima in order to obtain a method capable of displaying a selection of devices. The motivation for doing so would be to choose from amongst a group of registered printers.

With respect to claim 41, Shima discloses a managing device (network-compatible printer 51, see at least col. 23, lines 43-60) for use in an image output system having a plurality of image output devices (printer 51 and downstream printers 52, 53, ..., n, col. 24, lines 44-57) each of which is connected to a network (internet 55, see Fig. 12) and outputs an image on the basis of image data transmitted through said network, the managing device comprising logic for inputting information for indicating a search condition for said image output devices and information for instruction for selective grouping of image output devices satisfying the search condition (the printer driver initiates an attribute request to satisfy the requirement(s) of a print job, col. 25, line 60 – col. 26, line3).

Shima does not disclose expressly a group registering method, searching of image output devices satisfying the search condition on the basis of attribute

information of each of said image output devices, and transmitting the attribute information of said image output devices thus further searched, and registering image output devices as a group on the basis of the information for instruction of selective grouping.

Sakaguchi teaches a method of searching, registering printers as a group, and the ability to display these printers for selection (paras. 0018-0021) wherein the host receives a list of printers in which a multiple selection is possible (para. 0021).

Shima and Sakaguchi are analogous art because they are from the similar problem solving area of displaying capable devices to a user based on attributes. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to add the group registration feature of Sakaguchi to Shima in order to obtain a method capable of displaying a selection of devices. The motivation for doing so would be to choose from amongst a group of registered printers.

With respect to claim 42, Shima discloses a method for a plurality of image output devices (printer 51 and downstream printers 52, 53, ..., n, col. 24, lines 44-57) connected to a network (internet 55, see Fig. 12) in an image output system, wherein the image output devices output images on the basis of image data, and the image output system includes an image input device (host 54 user interface screen sends print jobs to network-compatible printer 51 as input to the printing system, col. 24, lines 40-44) for inputting the image data, and a display input device (settings window 60, col. 26, lines 5-7) for inputting information for indicating a search condition for said image output devices and for inputting information for instruction of selective grouping of image output

devices satisfying the search condition, and displaying attribute information of said image output devices, and a managing device (network-compatible printer 51, see at least col. 23, lines 43-60) for managing the attribute information of each of said plurality of image output devices, the method comprising the steps of:

transmitting from said image input device to said managing device (network-compatible printer 51, see at least col. 23, lines 43-60) the information representing the search condition for said image output devices input from said display input device;

searching for image output devices satisfying the search condition on the basis of each of the attribute information of said plurality of image output devices and transmitting the attribute information of said image output devices thus searched to said image input device in said managing device (network-compatible printer 51, see at least col. 23, lines 43-60).

Shima does not disclose expressly a group registering method, displaying the attribute information of said image output devices satisfying the search condition on said display input device and transmitting to the managing device information for instruction of selective grouping of image output devices satisfying the search condition input to said image input device; and registering said image output devices as a group according to the information for instruction of selective.

Sakaguchi teaches a method of registering printers as a group, and the ability to display these printers for selection (paras. 0018-0021) wherein the host receives a list of printers in which a multiple selection is possible (para. 0021).

Shima and Sakaguchi are analogous art because they are from the similar problem solving area of displaying capable devices to a user based on attributes. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to add the group registration feature of Sakaguchi to Shima in order to obtain a method capable of displaying a selection of devices. The motivation for doing so would be to choose from amongst a group of registered printers.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas J. Lett whose telephone number is (571) 272-7464. The examiner can normally be reached on 7-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on (571) 272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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